

CLAIMS

1. An activation control apparatus for controlling activation of an occupant protection apparatus that protects an occupant during collision of a vehicle, comprising:

a first sensor disposed in a vehicle body to be located at a predetermined position, the first sensor outputting a signal corresponding to deceleration acting on the vehicle;

a second sensor disposed in the vehicle body to be located forward with respect to the first sensor, the second sensor outputting a signal corresponding to deceleration acting on the vehicle;

collision severity determination means for determining, on the basis of the signals output from the first and second sensors, whether a collision experienced by the vehicle is severe;

collision symmetry determination means for determining, on the basis of the signals output from the first and second sensors, whether a collision portion of the vehicle involved in the collision has symmetry;

delay time changing means for changing, on the basis of the severity determined by the collision severity determination means and results of the symmetry determination performed by the collision symmetry determination means, a delay time to be provided between a point in time when a first output of the occupant protection apparatus is activated and a point in time when a second output of the occupant protection apparatus is activated; and

activation control means for controlling the activation of the first and second outputs of the occupant protection apparatus on the basis of the delay time changed by the delay time changing means.

2. An activation control apparatus according to claim 1, wherein when the collision symmetry determination means determines that the collision portion of the vehicle does not have symmetry, the delay time changing means increases the delay time as compared with a case in which the collision portion of the vehicle has symmetry.

3. An activation control apparatus according to claim 1 or 2, wherein the delay time changing means sets the delay time to zero when the collision severity determination means determines that the collision experienced by the vehicle is severe and the collision symmetry determination means determines that the collision portion of the vehicle has symmetry;

the delay time changing means sets the delay time to a short time when the collision severity determination means determines that the collision experienced by the vehicle is severe and the collision symmetry determination means determines that the collision portion of the vehicle does not have symmetry or when the collision severity determination means determines that the collision experienced by the vehicle is not severe and the collision symmetry determination means determines that the collision portion of the vehicle has symmetry; and

the delay time changing means sets the delay time to a long time when the collision severity determination means determines that the collision experienced by the vehicle is not severe and the collision symmetry determination means determines that the collision portion of the vehicle does not have symmetry.

4. An activation control apparatus according to any one of claims 1 to 3, wherein the collision symmetry determination means determines that the collision portion of the vehicle has symmetry when the deceleration acting on the vehicle and represented by the signal output from the first sensor is greater than a predetermined level.

5. An activation control apparatus according to claim 1, wherein the occupant protection apparatus comprises a multi-stage airbag apparatus including a plurality of inflators.

6. An activation control apparatus according to claim 1, wherein the first sensor is disposed on or in the vicinity of a floor tunnel provided at a central portion of the vehicle body; and the second sensor is disposed at a side member provided at a front portion of the vehicle body.